and Rehman 1997) and appears to be a distinct geographic morphocline representing north-eastern India.

The mean value of parotid gland length (PAL) standardized against SVL (SVL/PAL) is 4.00. Auffenberg and Rehman (1997) considered the central Indo-Gangetic-Indus river plains' populations (SVL/PAL 4.17) which represent the average condition with respect to PAL. That the proportionate parotid gland length tends to decrease in all directions from this central area is supported by our observation.

The mean TL standardized with SVL (SVL/TL) is 2.74. There occurs a distinct geographical morphocline from Kumaon Himalayas all along the Gangetic plain where

the value gradually decreases. The Assam set value is again different from the populations from central and eastern India.

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# 20. TAXONOMIC VARIATION IN *SCHISTURA VINCIGUERRAE* (HORA, 1935) FROM THE BASISTHA RIVER, A NEW RECORD FROM ASSAM, INDIA

The hill streams of Assam harbor varied fauna, which has not yet been fully assessed.

Several workers have studied the fish fauna of the hill streams of Assam, namely Hora (1935), Sen (1985) and Menon (1987). The river Basistha (26° 10'-26° 45' N and 90° 30' 92° 55' E) is located near Guwahati at an altitude of 80 m above msl. The river originates from Meghalaya and enters Assam near the Basistha temple.

S. vinciguerrae was first recorded by Hora (1935) from S. Shan State, Myanmar. Menon (1987) reported this species from Manipur. Das and Bordoloi (1997) recorded it from the Basistha river, Assam. The present paper gives a taxonomic description based on fifteen specimens collected from this river during 1997-2000. Differences from the earlier descriptions have been discussed.

Specimens were collected from the intermediate zone of the river and were preserved in 8% formalin. Live coloration was recorded before preservation. Description was compared with that in Talwar and Jhingran (1991) and Jayaram (1999). It was confirmed at the

Zoological Survey of India, Shillong. All measurements are in mm.

**Description:** Body marked with several vertical bands. Band anterior to the dorsal fin broken up into a number of narrow bands. Three to four complete bands up to base of caudal fin. Well-marked short prominent vertical band at base of caudal fin and two V-shaped bands at forked end of caudal fin. Dorsal fin with one or two rows of spots, anal and pelvic fins with one row each. Live specimens show pink coloration on the tips of barbels, dorsal fin, anal fin, pectoral fin, and pelvic and caudal fins from April to October. The colour disappears gradually after the breeding season and on preservation.

The size range recorded during the present investigation was 48 to 60 mm (standard length). Detailed body measurements are given in Table 1. Body elongated and sub cylindrical: Dorsal profile is slightly sagging, but ventral surface is

TABLE 1
MORPHOMETRIC MEASUREMENTS OF NEMACHEILUS VINCIGUERRAE (HORA, 1935)
FROM THE BASISTHA RIVER, ASSAM

								Specimen number								Range		Mean
Character (in mm)	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	Min.	Max.	(X)
Total Length (TL)	73	73	73	70	67	67	66	65	64	64	62	62	62	60	60	60	73	65.86
Standard Length (SL)	60	60	60	57	54	54	54	53	53	52	49	50	50	48	48	48	60	53.46
Fork Length (FL)	68	68	67	65	61	61	62	60	59	59	55	57	57	56	55	55	68	<b>6</b> 0.66
Length of Head	14	13	13	13	12	12	13	12	12	12	11	12	12	11	12	11	13	11.4
Head Depth	7	8	8	7	7	6	7	7	7	7	6	7	6	6	6	6	8	6.8
Head Width	11	10	9	9	8	9	9	9	9	8	7	8	8	8	8	7	11	8.66
Depth of Body	11	13	10	9	9	11	9	10	10	9	8	9	8	9	8	8	13	9.53
Length of Caudal																		
Peduncle	9	9	9	8	8	8	8	8	8	9	8	8	7	7	7	7	9	7.93
Depth of Caudal																		
Peduncle	8	7	7	7	6	6	7	6	6	6	6	6	6	6	6	6	8	6.4
Eye Diameter	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2			2.0
Snout Length	7	7	6	6	6	5	6	6	6	6	5	6	6	6	6	5	7	6.0
Post-Orbital Length	7	7	6	7	6	7	7	7	7	6	5	6	6	6	6	5	7	6.4
Pre-Dorsal Length	30	30	30	28	27	27	27	26	26	26	24	25	25	24	24	24	30	26.6
Pre-Pelvic Distance	33	32	32	30	29	28	29	29	30	28	26	28	27	26	26	26	30	28.86
Pectoral Fin Length	13	12	12	12	12	10	12	11	11	12	11	13	11	11	10	10	13	11.53
Pelvic Fin Length	12	11	11	10	11	9	11	10	10	10	9	11	10	10	10	9	12	10.33
Anal Fin Length	11	10	10	10	9	9	10	8	9	9	9	10	9	9	9	8	11	9.4
Dorsal Fin Length	13	12	12	12	12	12	11	12	12	12	11	13	10	12	11	11	13	11.8

at the same level as the rounded belly. Range in total length was 60 to 73 mm. Body depth was 4.6-6.33 in standard length. Head depressed. Head length 4.0 - 4.5 in standard length. Eyes small, placed high up and not visible from the under side of the head. Eye diameter 5.9-6.5 in head length. Nostrils close to each other. Mouth semicircular, lips moderately fleshy, upper lip faintly notched and lower lip interrupted in the middle. Well developed maxillary, rostral and mandibular barbels.

Caudal fin forked, both the lobes equal but the upper lobe sometimes slightly more slender than the lower lobe. Caudal peduncle 5.77-7.14 in standard length. Height of caudal peduncle 7.50-9.00 in standard length. Lateral line complete.

Schistura vinciguerrae (Hora 1935) was earlier known as Nemacheilus vinciguerrae. The type locality reported by Hora was S. Shan State, Burma (presently Myanmar). In India, the species was first recorded by Menon (1987) from Chindwin drainage, Irrawaddy and Salween river basins in Manipur. The present record extends the range of this fish westward to Guwahati in Kamrup District, Assam. Distinguishing characters mentioned in Talwar and Jhingran

(1999) were Diii 8; Aii 5; Pi 11; Vi 6. These characters were found to be Dii 8; Aii 5; Pi 9-11; Vi 5-6 in the present investigation. A slight variation was also noted in the length of caudal peduncle, which was 5.77-7.14 in standard length as compared to 6.1-6.8 recorded by earlier workers. Similarly, height of the caudal peduncle was found to be 7.5-9.0 in standard length instead of 7.7-8.8 recorded earlier.

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## 21. ON *PSEUDOSPHROMENUS* SP. (PISCES: BELONTIIDAE) FROM SOUTH INDIA WITH REMARKS ON THE AUTHORSHIP OF *P. DAYI*

The genus *Pseudosphromenus* is of ichthyological significance since it includes two species, *P. cupanus* and *P. dayi*, which are confined to the Indian subcontinent, the former

occurring in peninsular India and Sri Lanka, and the latter restricted to Kerala. *P. cupanus* was described by Cuvier and Valenciennes in 1831 from Arian Coupam, Pondicherry on the east